## Amendments to the Specification

Please replace the paragraph beginning at page 59, line 11, with the following redlined paragraph.

Groups of 8 female BALB/c mice (Charles River, St-Constant, Quebec, Canada)

were-are immunized by intramuscular injection of 100 µl three times at two- or three-week
intervals with 50 µg of recombinant pCMV-GH encoding modified—SHB GAS-102 SHB-GAS
102 (SEO ID NO:1), SHB-GAS-103 SHB-GAS-103 (SEQ ID NO: 3), and-SHB-GAS-104 SHB
GAS-104 (SEQ ID NO: 5) genes in presence of 50 µg of granulocyte-macrophage colonystimulating factor (GM-CSF)- expressing plasmid pCMV-GH-GM-CSF (Laboratory of Dr.

Stephen A. Johnston, Department of Biochemistry, The University of Texas, Dallas, Texas). As
control, groups of mice were-are injected with 50 µg of pCMV-GH in presence of 50 µg of
pCMV-GH-GM-CSF. Blood samples were-are collected from the orbital sinus prior to each
immunization and seven days following the third injection and serum antibody responses were
are determined by ELISA using the corresponding His-tagged labeled S. progenes
recombinant polypeptides as coating antigens. The production and purification of these Histagged labeled S. progenes S. progenes
recombinant polypeptides are presented in Example 6.

Please replace the paragraph beginning at page 61, line 10, with the following redlined paragraph.

Bacteria were-are grown in Todd Hewitt (TH) broth (Difco Laboratories, Detroit, Mich.) with 0.5% Yeast extract (Difco Laboratories) and 1% peptone extract (Merck, Darmstadt, Germany) at 37°C in a 8% CO<sub>2</sub> atmosphere to give an OD<sub>600</sub> nm of 0.600 (~10° CFU/ml). Dilutions of anti-SHB-GAS-102, anti-SHB-GAS-103, anti-SHB-GAS-104, or control sera were are then added and allowed to bind to the cells, which were-are incubated for 2 h at 4°C. Samples were-are washed 2 times in blocking buffer [phosphate-buffered saline (PBS) containing 2% bovine serum albumin (BSA)], and then 0.5 ml of goat fluorescein (FITC)-conjugated anti-mouse IgG+IgM diluted in blocking buffer was-is added. After an additional incubation of 60 min at room temperature, samples were-are washed 2 times in blocking buffer

Application No. 10/568,737 Reply to Office Action dated July 11, 2008

and fixed with 0.3% formaldehyde in PBS buffer for 18-24 h at  $4^{\circ}$ C. Cells  $\frac{\text{were-arc}}{\text{cells}}$  kept in the dark at  $4^{\circ}$ C until analyzed by flow cytometry (Epics@XL; Beckman Coulter, Inc.). Ten thousands intact  $\frac{S}{\text{cells}}$  progenes  $\frac{S}{\text{cells}}$  cells  $\frac{\text{were-arc}}{\text{cells}}$  analyzed per sample.